

西藏蔷薇科新植物

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TAXA NOVA ROSACEARUM XIZANGENSIIUM

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羽叶粉花绣线菊 新变种

Spiraea japonica L. f. var. **pinnatifida** Yü et Lu, var. nov.

A typo recedit foliis magnis 13—16 cm. longis, 3—4 cm. latis, oblongo-lanceolatis, margine inciso-pinnatifidis, argute duplicato-serratis. *S. micranthae* Hook. f. similis, quae inflorescentiis majoribus, carpellis glabris distinguitur.

Xizang: Cona Xian (错那县), alt. 2900 m. 5 V. 1974. Qing-Zang Exped. 74—2816 (Typus in HP).

本变种和原变种区别在于叶较大,长13—16厘米,宽3—4厘米,长圆披针形,边缘缺刻状羽裂,有尖锐重锯齿。又和喜马拉雅产的小花绣线菊 *S. micrantha* Hook. f. 区别在于后者花序较大,心皮光滑无毛。

毛果藏南绣线菊 新变种

Spiraea bella Sims var. **pubicarpa** Yü et Lu, var. nov.

A varietate prima folliculis omnino pubescentibus differt.

Xizang: Nyalam Xian (聂拉木县), alt. 2300 m. 13 VIII. 1972, Xizang Exped. Med. Pl. 1131 (Typus in HP); ibidem, Qing-Zang Exped. Complex Group 552; Gyirong (吉隆), Qing-Zang Exped. Veg. Group 5116.

本变种和原变种区别在于蓇葖果全体被柔毛。

裂叶绣线菊 新种

Spiraea lobulata Yü et Lu, sp. nov.

Proxima *S. velutinae* Franch., a qua differt gemmis brevioribus, ovoideis vel oblongo-ovoides, petiolis longioribus 6—10 mm. longis, foliis late ovatis vel rhombo-ovatis, margine dupliciter inciso-dentatis, subtus sericeo-villosis. persistentibus.

Frutex 1.5—3 m. altus; rami patentes, castanei, juventute adpresse tomentoso-pubescentes, demum glabrescentes; gemmae breviores, ovoideae vel elongato-ovoidae, dense tomentoso-pubescentes, perulis duabus exterioribus valvatis. Folia late ovata ad rhombo-ovata, 4—7 cm. longa, 3—5 cm. lata, acuta ad breviter acuminata, ad basim cuneata vel rotundata, supra sparse subtus densius sericeo-villosa, margine lobata, dup-

liciter inciso-serrata; petioli 6—10 mm. longi, dense tomentoso-villosi. Inflorescentia corymbosa composita, diam. ad 16 cm., multiflora, tomentoso-pubescent; pedicelli 4—6 mm. longi; bracteae lineari-lanceolatae vel lineares; flores diam. 4—6 cm.; calyx extus tomentoso-pubescent; calycis tubus campanulatus, dentibus triangularibus, acutis; petala subrotundata, apice obtusa, alba, 2—3 mm. diam.; stamina petalis valde longiora, antheris albis; discus annularis distincte 10-lobatus; carpodia densius pubescentia; styli staminibus breviores. Fructus calycis dentibus erectis instructi; folliculi patentes, omnino pubescentes, dorso stylum suberectum paullo infra apicem gerentes.

Xizang: Nyingchi Xian (林芝县), alt. 2480 m. 3 VIII. 1975, Qing-Zang Exped. Suppl. Group 75—1213 (Typus in HP); Bomi Xian (波密县), Qing-Zang Exped. Veg. Group 166; ibidem, Y. T. Chang (张永田) et K. Y. Long (郎楷永) 687; ibidem, T. S. Ying (应俊生) et D. Y. Hong (洪德元) 427; ibidem, Qing-Zang Exped. Complex Group 76-498, 76-738; ibidem, sine coll. 1536; Dongjug (东久), Qing-Zang Exped. Complex Group 76—521.

本种和绒毛绣线菊 *S. velutina* Franch. 相近,但冬芽短小,卵形或长卵形,叶柄较长,长6—10毫米,叶片宽卵形至菱状卵形,边缘具缺刻状重锯齿,下面的绢状长柔毛不脱落。

脱毛绣线菊 新变种

***Spiraea velutina* Franch. var. *glabrescens* Yü et Lu, var. nov.**

A varietate prima recedit foliis subtus glabrescentibus vel vix in nervis pubescentibus.

Xizang: Nyalam Xian (聂拉木县), alt. 2440 m. 26 VI. 1975, Qing-Zang Exped. 5939 (Typus in HP), 1434, 6670; Cona Xian (错那县), Qing-Zang Exped. Complex Group 1760.

本变种与原变种区别在于叶片下面毛脱落,几无毛或仅于叶脉上具柔毛。

西藏绣线菊 新种

***Spiraea tibetica* Yü et Lu, sp. nov.**

Species *S. alpinae* Pall. valde affinis, sed foliis utrinque pubescentibus, inflorescentiis 15—30-floris, floribus albido-roseis vel purpureis differt.

Frutex 0.6—1.5 m. altus; ramuli teretiusculi vel sparse angulati, rubro-brunnei vel cinereo-brunnei, pubescentes juventute glabriusculi vetustate; gemmae parvae, ovoideae, pubescentes, perulis pluribus imbricatis. Folia fasciculata, oblongo-obovata vel anguste elliptico-lanceolata, 7—15 mm. longa, 2—5 mm. lata, acuta vel obtusiuscula, basi cuneata, integra, utrinque pubescentia subtus glauca; petioli brevissimi. Inflorescentia umbellato-racemosa, 15—30-flora, pedunculis brevioribus instructa; pedicelli 3—6 mm. longi, glabri; calyx glaber; sepala triangularia vel triangulari-ovata, apice rotundata vel acuta; petala subrotundata vel obovata, obtusa, albido-rosea vel purpurea; stamina circa 15—20, petalis vix aequilonga, antheris flavis; discus 10—lobatus; ovaria glabra vel sparse puberula. Fructus calycis dentibus erectis; folliculi patentes, glabri

vel ad suturas ventrales pilosi, dorso stylum suberectum gerentes.

Xizang: Lhünzhub Xian (林周县), alt. 4200 m. 11 VI. 1960, K. H. Fu (傅国勋) 217 (Typus in HP); Maizhokunggar Xian (墨竹工卡县), K. H. Fu (傅国勋) 116; Namling Xian (南木林县), G. W. Chang (张经炜) 2624; ibidem, Qing-Zang Exped. 7534.

本种和高山绣线菊 *S. alpina* Pall. 近缘,但叶片两面均具柔毛,花序多花,具花 15—30 朵,花粉红色至紫红色,可以区分。

光秃绣线菊 新变种

Spiraea mollifolia Rehd. var. ***glabrata*** Yü et Lu, var. nov.

A typo recedit foliis glabris vel glabriusculis, inflorescentiis sparse pilosis, calycis tubo glabro vel parce piloso, sepalis glabris.

Xizang: Nyalam Xian (聂拉木县), alt. 3750 m. 11 VI. 1966, Y. T. Chang (张永田) et K. Y. Long (郎楷永) 3848 (Typus in HP), 3959, 4174; ibidem, Qing-Zang Exped. 5792; Cona Xian (错那县), C. Y. Wu et al. 75-948; Gyirong Xian (吉隆县), Qing-Zang Exped. 7179; Biru Xian (比如县), Qing-Zang Exped. 11349, 11363; Nyingchi Xian (林芝县), Qing-Zang Exped. Veg. Group 1805; Bomi Xian (波密县), Qing-Zang Exped. 74-3565; Dinggyê Xian (定结县), Qing-Zang Exped. 909; Tingri Xian (定日县), Qing-Zang Exped. 137; Turong (土隆), C. Y. Wu et al. 75-437.

本变种叶片下面无毛或近无毛,花序具稀疏柔毛;萼筒无毛或疏生柔毛,萼片无毛。

密花绣线梅 新种

Neillia densiflora Yü et Ku, sp. nov.

Species affinis *N. thyrsoflora* D. Don et *N. serratisepalae* Li, a quibus pedunculis brevioribus, inflorescentiis confertis, ramulis pedunculis pedicellis petiolis et foliis subtus dense fulvo-pubescentibus differt.

Frutex; ramuli teretes, rubri-brunnei, angulares, dense fulvo-pubescentes; gemmae ovoideae. Folia triangulari-ovata vel oblongo-ovata, 7—11 cm longa, 5—9 cm lata, apice caudata vel breviter acuminata, basi subcordata vel subrotundata, margine irregulariter duplicato-serrata vel simpliciter serrata, supra intense viridia, pilosa vel subglabra, nervis bene impressis, subtus pallide viridia, fulvo-pubescentia, pilis praesertim ad costas nervosque densioribus: petioli 1.5—2.5 cm longi, dense fulvo-pubescentes. Flores numerosi, in paniculam terminalem densam dispositi; pedunculus cum pedicellis 2.5 mm longis dense fulvo-pubescentibus; calycis tubus campanulatus, lobis triangulari-ovatis, apice acutis, extus dense pubescentibus tubo extus pubescente brevioribus; ovarium glabrum, ovulis 3—4. Folliculus extus dense puberulus et laxe glandulosus, calycis lobis persistentibus coronatus; semen ovoideum, fulvum, nitidum.

Xizang: Yadong Xian (亚东县) alt. 2700 m., 11 IX. 1974, Qing-Zang Exped. 74-2297 (Typus in HP); ibidem, sine coll. 75-992.

本种近似于绣线梅 *N. thyrsoflora* D. Don 和云南绣线梅 *N. serratisepala* Li, 惟本种总花梗较短,花序密集,小枝、总花梗、花梗、叶柄及叶片下面均密被黄褐色柔毛,易于区别。

大花绣线梅 新种***Neillia grandiflora*** Yü et Ku, sp. nov.

Species similis *N. thrysiflorae* D. Don, sed floribus majoribus, 7—10 mm diam., rubris, staminibus numerosis, tubo calycis lobisque extus dense pubescentibus differt.

Frutex deciduus, 2—3 m. alt.; ramuli graciles, rubri-brunnei, glabri vel subglabri; gemmae ovoideae, pauci-perulatae, perulis margine ciliatis. Folia ovata vel oblongo-ovata, 4—10 cm longa, 2.5—8 cm lata, apice caudata vel longe caudata, basi cordata vel subcordata, margine irregulariter duplicato-serrata, prope apicem dense simpliciter serrata, supra medium pinnatim 2—4-lobata, supra glabra, subtus secus nervos pilosa; petioli 1—2.5 cm longi, sparse puberuli; stipulae oblongae vel lanceolatae, caducae. Flores numerosi in paniculam terminalem dispositi, 7—10 mm diam.; pedicelli 4—8 mm longi ut pedunculi dense pubescentes; tubus calycis campanulatus, lobis triangulari-ovatis, apice caudatis vel longe caudatis, extus dense pubescentibus tubo subaequilongis vel eo leviter brevioribus; petala rubra, obovata, apice erosula, sepalis breviora vel eis subaequilonga; stamina 23—27, filamentis haud aequilongis, 2-verticillatis; carpellum unicum, ovario glabro vel tantum apice piloso, ovulis 10—12. Folliculus oblongus, sepalis persistentibus, extus dense puberulis, stipitato-glandulosisque coronatus.

Xizang: Nyalam Xian (聂拉木县), alt. 2600—2700 m., 29 VI. 1975, Qing-Zang Exped. Veg. Group 4452 (Typus in HP); ibidem, Qing-Zang Exped. 6036, 6626; ibidem, Xizang Exped. Med. Pl. 1266, 1380, 1468.

本种与绣线梅 *N. thrysiflora* D. Don 相近似,唯本种花大,直径 7—10 毫米,红色;雄蕊数目较多,萼筒和萼片外面密被绒毛状柔毛,两者易于区别。

大叶石楠 新种***Photinia megaphylla*** Yü et Ku, sp. nov.

Species similis *P. tushanensi* Yü, sed foliis ellipticis obovatis, 16—27 cm longis, apice acuminatis vel caudato-acuminatis, nervis lateralibus 20—25-jugis, ramulis pedunculis pedicellis et foliis subtus dense fulvo-tomentosis differt.

Frutex circiter 3 m. alt.: ramuli robusti, angulares, dense fulvo-tomentosi. Folia elliptica vel elliptico-obovata, 16—27 cm longa, 10—12 cm lata, apice acuminata vel caudato-acuminata, basi late cuneata vel subrotundata, margine obscure crenata, supra glabra, subtus dense fulvo-tomentosa, costa media bene elevata, nervis lateralibus 20—25-jugis, supra impressis; petioli 2—3 cm longi, dense fulvo-tomentosi; stipulae deciduae. Flores numerosi in corymbum compositum dispositi; pedicelli 2—5 cm longi cum pedunculis dense fulvo-tomentosi; tubus calycis campanulatus, lobis triangulari-ovatis apice acutis tubo brevioribus, extus puberulis vel fere glabris; styli 2, basi coaliti; ovarium in quoque loculo 2 ovulis instructum.

Xizang: Mêdog Xian (墨脱县), alt. 1800 m., 6 VIII. 1974. Qing-Zang Exped.

74-4158 (Typus in HP).

本种近似于独山石楠 *Photinia tushanensis* Yü, 唯本种叶片较大, 椭圆形至椭圆状倒卵形, 长 16—27 厘米, 先端渐尖至尾尖, 侧脉 20—25 对; 小枝、花梗和总花梗及叶片下面均密被褐黄色绒毛。

脱毛冠萼花楸 新变种

Sorbus coronata (Card.) Yü et Tsai var. ***glabrescens*** Yü et Lu, var. nov.

A varietate typica petiolis brevioribus 0.5—1 cm. longis, foliis subtus et pedicellis glabrescentibus, glabris vel glabriusculis differt.

Xizang: Mêdog Xian (墨脱县), alt. 2800 m. 3 VIII. 1974, Qing-Zang Exped. 74-4016 (Typus in HP).

本变种和原变种区别在于叶柄较短, 长 0.5—1 厘米, 叶片下面和花梗毛脱落, 无毛或近无毛。

尾叶花楸 新种

Sorbus subochracea Yü et Lu, sp. nov.

Habitu *S. ochraceae* (Hand.-Mazz.) Vidal similis, a qua foliis apice longe acuminatis vel caudatis, margine in parte majore integris circa apice vel prope apicem a tertio supero parce obtuse serratis, nervis utrinque 10—15, petiolis brevioribus ca. 1 cm. longis, fructibus majoribus 1—1.5 cm. diam. differt.

Arbor ad 6 metralis; ramuli teretes, juventute tomentoso-pilosi demum glabrescentes, lenticellis pluribus albidis oblongis instructi. Folia elliptico-lanceolata, 11—15 cm. longa, 4—6 cm. lata, apice longe acuminata vel caudata, ad basim cuneata, margine in parte majore integra, apice vel prope apicem a tertio supero parce obtuse serrata, supra glabra subtus juventute ferrugineo-tomentoso-pilosa, demum glabrescentia vel in costis sparsim pilosa, nervis utrinsecus 10—15 leviter curvatis ante marginem in nervulos dissolutis; petioli circa 1 cm. longi, ferrugineo-tomentoso-pilosa. Inflorescentia corymbosa multiflora pedunculis pedicellisque initio tomentoso-pilosis demum glabrescentibus. Fructus globosi 1—1.5 cm. diam. flavo-ochracei, lenticellis pluribus notati et apice cicatricibus calycium deciduorum instructi.

Xizang: Mêdog Xian (墨脱县), alt. 2200 m. 30 VIII. 1974, Qing-Zang Exped. 4954 (Typus in HP).

本种近似褐毛花楸 *S. ochracea* (Hand.-Mazz.) Vidal, 但叶片顶端长渐尖至尾尖, 边缘大部分全缘, 仅顶端或近顶端自 1/3 以上部有少数疏锯齿, 叶脉 10—15 对, 叶柄较短, 长约 1 厘米, 果实较大, 直径 1—1.5 厘米, 可以区别。

察隅花楸 新种

Sorbus zayuensis Yü et Lu, sp. nov.

Species *S. prattii* Koehne affinis, quae foliis 9—13(17)-jugis subtus in costis sparse pilosis, margine supra medium argute serratis, inflorescentiis pubescentibus differt. Habitu *S. monbeigii* (Card.) Yü affinis, a qua foliis 5—8-jugo-pinnatis,

foliolis subtus cum petiolis ut rhachidibus et inflorescentiis calycibusque glabris diagnoscutur.

Arbor ca. 4 metralis; ramuli brunneo-cinerei glabri, lenticellis parvis armati. Foliola 5—8-juga, interstitiis inter se 1—1.3 cm. longis, oblonga vel elliptico-oblonga, 2—3.5 cm. longa et 0.9—1.2 cm. lata, apice obtusa vel acutiuscula, basi late cuneata vel oblique rotundata, margine praeter partem basalem grosse et argute serrata, utrinsecus glabra; petioli 2—3 cm. longi cum rhachidibus glabri; stipulae herbaceae, denticatae vel integrae, sub anthesi saepe persistentes. Inflorescentiae dense multiflorae, pedunculis pedicellisque glabris; pedicelli 2—4 mm. longi; flores diam. 8—10 mm; calyx glaber; petala subrotundata vel elliptica, alba, intus puberula vel glabriuscula; stamina circiter 20, petalis breviora; styli 4, staminibus fere aequilongi, glabri, basi connati vel subliberi.

Xizang. Zayü Xian (察隅县), alt. 3600 m. 22 VI. 1973, Qing-Zang Exped. 73-314 (Typus in HP).

本种和西康花楸 *S. prattii* Koehne 近缘,但后者小叶片 9—13(17) 对,下面沿中脉有疏柔毛,边缘自中部以上有尖锐细锯齿,花序有柔毛。又和云南西北部产的维西花楸 *S. monbeigii* (Card.) Yü 比较,本种小叶 5—8 对,小叶片下面、叶柄、叶轴、花序和花萼均无毛,可以区别。

白毛花楸 新种

***Sorbus albopilosa* Yü et Lu, sp. nov.**

Ex affinitate *S. rufopilosae* Schneid., a qua foliolis leviter angustioribus, inflorescentiis pluribus, rhachidibus et foliolis utrinque inflorescentiis calycibusque albido-pilosis diagnoscutur. Species *S. setschwanensi* (Schneid.) Koehne similis, quae rhachidibus cum foliolis utrinsecus et inflorescentiis calycibusque glabris, floribus et fructibus albidis differt.

Frutex vel arbor parva (2)5—8 metralis; ramuli teretes purpureo-brunnei, initio pilosi mox glabri, lenticellis paucis instructi; gemmae oblongo-ovoideae, acutae, pauciperulatae, sparse fusco-pilosa. Foliola (9)12—17-juga, interstitiis inter se 5—8 mm. longis, oblonga vel ovato-oblonga, 10—20 mm. longa, 4—6 mm. lata, acuta, basi late cuneata vel subrotundata, margine dentibus utrinsecus circiter 5—10, prope basim vel infra medium integra, utrinque albido-pilosa demum glabrescentia; rhachis exalata et anguste alata, albido-pilosa juventute glabriuscula in vetustate; stipulae lanceolatae, subherbaceae, integrae. Inflorescentiae corymbosae multiflorae, pedunculis cum pedicellis calycibusque albido-pilosis; calyx campanulatus; sepala triangularia, acuta; petala subrotundata 3—4 mm. diam., palliderosea vel rubro-purpurea, glabra; stamina ca. 20; styli 3—5 staminibus fere aequilongi, basi pubescentes, stigmatibus pubescentibus instructi. Fructus ovoideo-globosi diam. 6—8 mm., rubri, apice sepalis erectis persistentibus.

Xizang: Yadong Xian (亚东县), alt. 3400 m. 10 VIII. 1975, Qing-Zang Exped. Complex Group 948 (Typus in HP), 905, 949; ibidem, Qing-Zang Exped. 2335, 2393, 2498; ibidem, K. H. Fu (傅国勋) 1000; Nyalam Xian (聂拉木县), S. Chiang (姜恕) et D. Cheng (郑度) 118; Cona Xian (错那县), Qing-Zang Exped. Veg. Group 2636.

本种近似红毛花楸 *S. rufopilosa* Schneid., 惟小叶片稍窄, 花序具较多花朵, 叶柄、小叶片两面和花萼均被白色疏柔毛。又和四川花楸 *S. setschwanensis* (Schneid.) Koehne 区别在于后者叶轴、小叶片两面、花序和花萼均无毛, 花和果实稍白色, 三者可以区别。

少毛花叶海棠 新变种

Malus transitoria (Batal.) Schneid. var. *glabrescens* Yü et Ku, var. nov.

A var. *transitoria* differt foliis subtus glabris, pedicellis et calycis tubo extus sparsissime puberulis vel subglabris.

Xizang: Qamdo Xian (昌都县), alt. 3550 m., 26 IX. 1976, Qing-Zang Exped. Veg. Group 10023 (Typus in HP); ibidem, sine coll. 76—66; ibidem, Y. W. Tsui 5553.

本变种与原变种的主要区别在于叶片下面无毛, 花梗和萼筒外面有极疏柔毛至几无毛。

藏南悬钩子 新种

Rubus austro-tibetanus Yü et Lu, sp. nov.

Species *R. aurantiaco* Focke affinis, a quo differt floribus purpureis, fructibus oblongo-ovoideis, rubris, e drupeolis numerosis compositis. *R. idaeo* L. similis, qui foliis in ramis sterilibus saepe 5—7 foliolatis, calycibus externe tomentoso-pubescentibus et paulo aculeis acicularibus instructis, floribus albis, fructibus subglobosis distinguitur.

Frutex 1—2 m. altus, ramulis junioribus pubescentibus mox glabrescentibus, aculeis paucis armatis. Folia saepius ternata; foliola late ovata, terminale ovato-lanceolatum, 4—8 cm. longa, 3—6 cm. lata, apice breviter acuminata vel caudata, basi late cuneata vel rotundata, supra glabra subtus dense cano-tomentosa, margine inaequaliter grosse vel duplicato-serrata; petioli 5—8 cm. longi, pubescentes mox glabriusculi, sparsim aculeati; stipulae lineares, pubescentes. Flores 5—10 in corymbum terminale dispositi vel 1—3 axillares; pedicelli 1—2 cm. longi; bractae lineares minores; flores diam. 1.5—2 cm.; calycis tubus pubescens, interdum aculeolis paucis armatus; sepala late ovata vel oblongo-ovata, apice abrupte mucronata vel acuminata, cinereo-tomentosa, post anthesin erecto-patentia; petala late obovata vel elliptica, purpurea, utrinque puberula, unguiculata; stamina numerosa, filamentis filiformibus, stylis longiora; pistilla multa, ovariis cum stylorum parte inferiore dense cinereo-tomentosis. Fructus oblongo-ovoidei 1—1.5 cm. longi, rubri, cinereo-tomentosi, e drupeolis numerosis compositi.

Xizang: Mêdog Xian (墨脱县), alt. 3250 m. 31 VII. 1974, Qing-Zang Exped 74-

3776 (Typus in HP); ibidem, Qing-Zang Exped. Complex Group 2345; Mainling Xian (米林县), Qing-Zang Exped. Suppl. Group 75-859; ibidem, Xizang Exped. Med. Pl 4205; Lhünzê Xian (隆子县), Qing-Zang Exped. Suppl. Group 75-0478; Cona Xian (错那县), C. Y. Wu et al. 75-1085; Yadong Xian (亚东县), Qing-Zang Exped. Complex Group 74-2514; ibidem, P. C. Tsoong 5909; Dinggye Xian (定结县), Qing-Zang Exped. Veg. Group 3661; Nyalem Xian (聂拉木) Qing-Zang Exped. Veg. Group 4900; ibidem, Y. T. Chang (张永田) et K. Y. Long (郎楷永) 3058, 4492; ibidem, Qing-Zang Exped. 6162; ibidem, Qing-Zang Exped. Complex Group 794.

Yunnan: Jingdong Xian (景东县) C. A. Wu (武全安) 9322; Drungzu, T. T. Yü 20105; Pianma (片马). S. K. Wu (武素功) 8153.

本种和桔红悬钩子 *R. aurantiacus* Focke 相近, 但花紫红色, 果实长卵形, 红色而具多数小核果。此种与分布华北、东北、西北的覆盆子 *R. idaeus* L. 的异点在于后者的小叶在营养枝上常为 5—7 数, 花萼外被绒毛状短柔毛和稀疏针刺, 花瓣白色, 果实近球形。

紫红悬钩子 新种

Rubus subinopertus Yü et Lu, sp. nov.

Species habitu *R. inoperto* (Diels) Focke similis, sed ramulis inflorescentiis calycibusque pubescentibus, inflorescentiis multifloris, ovariis tomentosis, fructibus flavo-roseis vel purpureis, cinereo-tomentosis differt.

Frutex 1—3 m. altus; ramuli dense pubescentes mox glabrescentes, aculeis sparsis recurvisque instructi; folia (5)7—11-jugo-pinnata; foliola ovata ad ovato-lanceolata, 4—7 cm. longa, 2—4 cm. lata, apice acuminata basi late cuneata vel rotundata, supra juventute pilosa subtus in nervis pubescentia, margine grosse argute vel inciso duplicato-dentata, terminale saepissime pinnato-lobatum; petioli cum petiololis rhachidibusque pubescentes, aculeis falcatis minoribusque armati; stipulae lineares vel lineari-lanceolatae. Inflorescentiae racemosae vel corymbosae in ramis terminalibus vel ex axillis foliorum inferiorum ortae, rarius flores solitari, axillares; flores diam. 1—1.5 cm.; calyces brunneo-purpurei, externe pubescentes interne cano-tomentosi; sepala ovata vel triangulari-lanceolata, acuta vel acuminata, in fructu saepissime reflexa; petala obovata vel subrotundata, rosea vel purpurea, prope basim pubescentia; stamina numerosa filamentis filiformibus, stylis super antia; pistilla multa, cvariis cum stylorum parte inferiore dense cano-tomentosis. Fructus maturi hemisphaerici diam. 8—12 mm., flavo-rubri vel purpurei, dense cinereo-tomentosi.

Xizang: Mêdog Xian (墨脱县) alt. 2100 m. 4 VIII, 1974, Qing-Zang Exped. 74-4042 (Typus in HP); Dinggye Xian (定结县), Qing-Zang Exped. 5626.

Yunnan: Yongshan Xian (永善县), H. T. Tsai 51034.

Sichuan: Tianquan Xian (天全县), H. L. Tsiang (蒋兴廖) et T. H. Hsiung (熊济华) 34432, 35316, 35324; ibidem, W. K. Hu (胡文光) 34655; ibidem, K. C. Kuan (关克俭) et al. 1946; Hongya Xian (洪雅县) C. W. Yao (姚仲吾) 3702; Leibo Xian

(雷波县) Z. T. Quan (管中天) 8222; Guan Xian (灌县) T. N. Liou 9905; Shimian Xian (石棉县) C. C. Hsieh (谢朝俊) 40964, 42154, 42291, 42538; Liang Shan (凉山) Z. T. Quan (管中天) 10046; Emei Shan (峨眉山), K. H. Yang (杨光辉) 55456, 56352, 56488, 56705; ibidem, W. P. Fang 6534, 6740, 7650, 12797, 20469, 20746; ibidem, H. L. Tsiang (蒋兴廖) et S. S. Chang (张秀实) 31247, 32298, 32683; ibidem, T. N. Liou 12968; ibidem, K. C. Kuan et al. 1688, 4134, 4146, 4168, 4195。

本种近似分布于我国西南部的红花悬钩子 *R. inopertus* (Diels) Focke, 但小枝、花序和花萼均具柔毛, 花序有较多花朵, 小房具绒毛, 果实熟时黄红色或紫红色, 被灰白色短绒毛, 易于区分。

柔毛悬钩子 新种

Rubus pubifolius Yü et Lu, sp. nov.

Species habitu *R. pseudopileatus* Card. affinis, sed foliis utrinque pubescentibus, margine irregulariter densius serrulatis vel duplicato-dentatis, pedicellis 4—6 cm. longis diversa. *R. subinoperto* Yü et Lu similis, qui foliolis (5) 7—11 jugatis, inflorescentiis breviter racemosis vel corymbosis, pedicellis 0.7—1.5 cm. longis, floribus diam. 1—1.5 cm. distinguitur.

Fruticosus; ramuli teretes, breviter pubescentes, aculeis tenuibus armati. Folia pinnato-quinata vel septenata, rarius in ramis floriferis ternata; foliola elliptica vel ovata, terminale ovatum vel ovato-lanceolatum interdum trilobatum, 4—7 cm. longa, 2—4.5 cm. lata, acuta vel breviter acuminata, basi cuneata vel rotundata, subtus densius supra sparse pubescentia, margine irregulariter densius serrulata vel duplicato-dentata; petioli cum petiolulis pubescentes et tenuiter aculeolati; stipulae lineares vel lineari-lanceolatae, pubescentes; flores saepe solitarii, diam. ad 2 cm; pedicelli 4—6 cm. longi, pubescentes, aculeis acicularibus, glandulis stipitatis spasis intermixtis; calyces externe pubescentes, inermes vel paullo aculeati; sepala ovata vel ovato-lanceolata, caudata, 1—1.8 cm. longa, post anthesin saepius patentia; stamina numerosa, biseriata, filamentis inferne complanatis; ovaria dense tomentosa.

Xizang: Gongbogyamda Xian (工布江达县), alt. 4200 m. 6 VIII. 1975, C. Y. Wu et al. 75-1185 (Typus in HP).

此种和四川西部产的假帽莓 *R. pseudopileatus* Card. 相近, 但叶片两面均被短柔毛, 边缘有不整齐细密锯齿或重锯齿, 花梗长 4—6 厘米。又和紫红悬钩子 *R. subinopertus* Yü et Lu 区别在于后者小叶 (5) 7—11 对, 花成短总状或伞房状花序, 花梗长 0.7—1.5 厘米, 花直径 1—1.5 厘米。

墨脱县钩子 新种

Rubus metoensis Yü et Lu, sp. nov.

Habitu *R. wardii* Merr. proxima, a quo omnino planta eglandulosa, floribus minoribus diam. 1—1.5 cm., pedicellis brevioribus fere 1 cm. longis, pistillis paucioribus recedit. Ex affinitate *R. senchalensi* Hara, qui planta inermi, foliolis 1—2-jugis, ob-

longo-lanceolatis, acuminatis, margine dupliciter serratis, 14—22-costulatis, inflorescentiis corymbosis, 2—4 floris distinguitur.

Frutex humilis; ramuli teretes, flexuosi, rubro-brunnei, pubescentes, aculeis acicularibus tenuibusque instructi. Folia plurima ternata, suprema interdum simplicia; foliola ovata vel elliptica, termanale rhombeo-ovatum, 3.5—7 cm. longa, 2—4.5 cm. lata, acuta, basi cuneata vel rotundata, supra sparsim adpresse pilosa, subtus in nervis pubescentia et minute aculeolata, margine inaequaliter grosse et obtuse dentata, utrinsecus fere 5—7-costulata; petioli 2—3.5 cm. longi, pubescentes et tenuiter aculeolati; stipulae profunde incisae, lobulis lineari-lanceolatis pubescentibus; flores saepissime solitarii diam. 1—1.5 cm., pedicellis fere 1 cm. longis, pubescentibus, aculeis acicularibus armatis; bractee stipulis similes, sed minores; calyces externe pilosi, purpureo-brunnei, cupulis sparsim aculeis tenuibus instructi; sepala triangulari-lanceolata externa apice caudata, integra, interna saepius triloba, lobulis linearibus; stamina numerosa filamentis filiformibus vel inferne dilatatis; pistilla pauciora, staminibus breviora, ovariis cano-tomentosis.

Xizang: Mêdog Xian (墨脱县), 16 IX. 1974, Qing-Zang Exped. Veg. Group 3236 (Typus in HP).

本种外形近似大花悬钩子 *R. wardii* Merr., 但植株不具腺毛, 花小, 直径 1—1.5 厘米, 花梗短, 长约 1 厘米, 雌蕊较少。又和印度大吉岭产的 *R. senchalensis* Hara 区别在于后者常无刺, 小叶 3—5 枚, 长圆披针形, 顶端渐尖, 边缘具重锯齿, 叶脉 14—22 对, 花常 2—4 朵成伞房状花序。

聂拉木悬钩子 新种

Rubus nyalamensis Yü et Lu, sp. nov.

R. fockeano S. Kurz affinis, qui caulibus et petiolis pedicellisque pubescentibus sed esetosis, calycibus externe pubescentibus vel setis mollibus intermixtis, floribus saepe solitariis, sepalis ovato-lanceolatis ad anguste lanceolatis, apice saepe integris, petalis obovato-oblongis ad lineari-oblongis, pistillis ca. 4—20, putamine rugoso distinguitur.

Herbaceus perennis, reptans; caules ad internodia radicales cum petiolis et nervis foliorum pedicellis calycibusque setis rubro-brunneis et pubescentibus obsiti. Folia ternata, foliolis late obovatis ad rotundatis 1—3 cm. longis, 0.8—2.8 cm. latis, apice rotundatis ad basim oblique late cuneatis, utrinque parce pilosis, subtus in nervis sparsim setosis, margine tenuiter duplicato-serratis, interdum obsolete lobatis; petioli petiolulique pubescentes; stipulae liberae, membranaceae, brunnae, ovatae, integrae vel apice incisae, pubescentes, persistentes. Flores 2—4 rarius solitarii, terminales vel axillares; pedicelli 1—4 cm. longi, pubescentes; bractee stipulis similes, apice saepe profunde inciso-dentatae; flores diam. 2—2.5 cm; sepala triangulari-ovata ad ovato-lanceolata, acuta vel acuminata, saepissime laciniosa rarius integra; petala late obovata, alba, sepalis longiora; stamina numerosa filamentis erectis, inferne dilatatis com-

planatis; pistilla fere 25—70 vel plura, ovariis glabris vel laxe pilosis. Fructus globosi, rubri, glabri, e drupeolis multis ovato-globosis compositi; putamen vix rugulosum.

Xizang: Nyalam Xian (聂拉木县), alt. 2400—2600 m. 29 VI. 1975, Qing-Zang Exped. 6099 (Typus in HP); ibidem, Y. T. Chang (张永田) et K. Y. Long (郎楷永) 3362, 4410, 4514, 4515, 4535; ibidem, Xizang Exped. Med. Pl. 1224; Mêdog Xian, (墨脱县), Qing-Zang Exped. 74-3902.

本种和凉山悬钩子 *R. fockeanus* S. Kurz 区别在于后者茎、叶柄和花梗仅具柔毛, 无刺毛, 花萼外被柔毛或具疏密不等的刺毛, 花常单生, 萼片卵状披针形至狭披针形, 顶端常不分裂, 花瓣倒卵状长圆形至带状长圆形, 雌蕊约 4—20, 核具皱纹。

小叶蛇莓 新变种

Duchesnea indica (Andr.) Focke var. **microphylla** Yü et Ku, var. nov.

A var. *indica* differt foliis minoribus, petiolo incluso 2—3 cm longis, foliolis haud ultra 1 cm longis subtus cum petiolis dense villosis; floribus minoribus, haud ultra 1 cm diam., pedicellis brevioribus, 5—15 mm longis, dense villosis.

Xizang: Bomi Xian (波密县), alt. 2550 m., 20 V. 1965, T. S. Ying (应俊生) et D. Y. Hong (洪德元) 0023 (Typus in HP); Markam Xian (芒康县), Qing-Zang Exped. Veg. Group 8215.

本变种与原变种的主要区别在于叶片较小, 连叶柄长 2—3 厘米; 小叶片长不超过 1 厘米, 下面和叶柄密被长柔毛; 花梗短, 长 5—15 毫米, 密被长柔毛; 花小, 直径不超过 1 厘米。易于区别。

西藏蔷薇 新种

Rosa tibetica Yü et Ku, sp. nov.

Species *R. webbianae* Rolfe affinis, sed foliolis margine duplicato-serratis, subtus dense glandulosis, floribus albis nec rubris distant.

Frutex parvus, ramuli recurvi, glabri, aculeis sparsis vel oppositis rectis pallide luteis vel interdum acieulis muniti. Folia 5—7-foliolata, petiolo incluso cir. 4 cm longa; foliola oblonga, 1—1.3 cm longa, 5—8 mm lata. apice obtusa, basi subrotundata vel late cuneata, margine dupliciter serrata, dentibus apice saepe glandulosis, supra intense viridia, glabra, subtus pallidiora, glandulosa, costa et nervis elevatis; petioli ut rhachis sparsissime stipitalo-glandulosi, aculeis paucis parvisque muniti; stipulae magna ex parte petiolo adnatae, auriculis ovatis. Flores solitarii, 3.5—4 diam.; pedicelli 2 cm longi, glabri, basi bracteati, bracteis ovatis, 1.5 cm. longis, apice saepe trilobis; calycis tubus ovato-rotundatus, lobis ovato-lanceolatis, apice caudatis integris vel apice obscure denticulatis, extus subglabris, intus dense pubescentibus; petala alba, late obovata, sepalis paulo longiora; styli liberi, dense albo-villosi. Fructus ovato-globoideus 1—1.2 cm diam., glaber, calycis lobis erectis persistentibus coronatus.

Xiang: Lhorong Xian, alt. 4000 m., 8 VII. 1976, Qing-Zang Exped. Veg. Group 8982 (Typus in HP); Bomi Xian (波密县) sine coll. 970.

本种近似藏边蔷薇 *R. webbiana* Royle, 惟本种小叶片边缘为重锯齿, 下面有腺; 花白色, 易于区别。

西康蔷薇 新种

Rosa sikangensis Yü et Ku, sp. nov.

Proxima *R. sericeae* Lindl., a qua differt foliolis margine dupliciter serratis, subtus dense glandulosis.

Frutex parvus, 1—1.5 m. altus; ramuli fere glabri, aculeis sparsis vel oppositis, aciculis densis juventute apice glandulosis muniti. Folia 7—9 (—13)-foliolata petiolo incluso 3—5 cm longa; foliola oblonga vel obovata, 6—10 mm longa, 4—8 mm lata, apice obtusa vel truncata, basi subrotundata vel late cuneata, margine dupliciter serrata, supra glabra vel fere glabra, subtus glandulosa; petioli ut rhachis pubescentes, sparse stipitato-glandulosi; stipulae latae, margine glanduloso-ciliatae utrinque glabrae vel fere glabrae, petiolis magna ex parte adnatae, auriculis ovatis, acinaciformibus, patentibus. Flores solitarii, cir. 2.5 diam., pedicelli breves, 8—12 mm longi, stipitato-glandulosi, basi ebracteati; calycis tubus ovoideus glaber, lobis ovato-lanceolatis, apice longe acuminatis, intus dense pubescentibus, extus sparse stipitato-glandulosi; petala 4, albi, obovata, apice leviter emarginta, basi late cuneata; styli liberi, villosi, staminibus multum breviores. Fructus ciriter 1 cm diam. subglobularis, ruber extus glandulosus; pedicelli fructiferi graciles, glandulosi.

Xizang: Burang Xian (普兰县) alt. 3700 m., 16 VII. 1976, Qing-Zang Exped. 5492 (Typus in HP); Gyirong Xian (吉隆县), Qing-Zang Exped. 72-14; Nyalam Xian (聂拉木县), Chiang Shu (姜恕) et al. 177; Lhunze Xian (隆子县), Qing-Zang Exped. Suppl. Group 75-0431; Mainling Xian (米林县), Qing-Zang Exped. 74-4699; Bomi Xian (波密县), T. S. Ying (应俊生) et D. Y. Hong (洪德元) 1115; 1050.

Yunnan: Zhongdien Xian (中甸县), T. T. Yü 13484; ibidem, G. M. Feng 23234.

Sichuan: Jioulung Xian (九龙县), T. S. Ying (应俊生) 3657; Muli Xian (木里县), T. T. Yü 6976.

本种近似绢毛蔷薇 *R. sericea* Lindl., 唯小叶边缘为重锯齿, 下面有腺易于区别。

重齿蔷薇 新种

Rosa duplicata Yü et Ku, sp. nov.

Species *R. soulieanae* Crép. affinis, a qua foliolis margine dupliciter serratis, subtus glandulosis, floribus solitariis vel 2—3 fasciculatis differt.

Frutex parvus, 1.5—2 m. alt.: rami robusti, fumigati; ramuli graciles, recurvi, purpureo-brunnei, glabri, aculeis sparsis pallide luteis muniti. Folia 3—5-foliolata cum petiolo 2—2.5 cm longa; foliola obovata vel elliptica, apice obtusa vel truncata, basi subrotundata vel late cuneata, margine dupliciter serrata, dentibus apice glandulosis, utrinque glabra, subtus dense glandulosa; petioli ut rhachis sparse stipitato-glandulosi, aciculis paucis parvisque muniti; stipulae maxima parte petiolo adnatae.

Flores solitariae vel 2—3 fasciculati, cir. 1 cm diam.; pedicelli 5—10 mm longi, stipitato-glandulosi, basi bracteati; calycis tubus subgloboideus, extus puberulus, lobis ovato-lanceolatis, apice breviter caudatis, integris, extus sparse pubescentibus glandulosisque intus dense puberulis; sub fructu deciduis; petala pallide lutea vel alba, obovata; stamina numerosa; styli in columnam coaliti, exserti, pilosi vel subglabri, staminibus longiores. Fructus ciriter 5 mm diam., purpureo-ruber; pedicelli fructiferi glandulosi.

Xizang: Markam Xian (芒康县) alt. 2400—2600 m, 3 VI. 1976, Qing-Zang Exped. 11713 (Typus in HP.).

Yunnan: Dêqên Xian (德钦县), sine coll. 10345.

本种近似于川滇蔷薇 *R. soulieana* Crep., 惟本种小叶边缘为重锯齿, 下面有腺; 花单生或 2—3 朵簇生。易于区别。

小叶川滇蔷薇 新变种

Rosa soulieana Crép. var. *microphylla* Yü et Ku, var. nov.

A var. *soulieana* differt foliolis minoribus haud ultra 8 mm longis, floribus solitariis.

Xiang: Baxoi Xian (八宿县), alt. 3600—3700 m., 4 VII. 1976, Qing-Zang Exped. 12193 (Typus in HP); ibidem, Y. T. Chang (张永田) et K. Y. Long (郎楷永) 421.

本变种小叶片较小, 长不超过 8 毫米, 花单生。

少对峨眉蔷薇 新变种

Rosa omeiensis Rolfe var. *paucijuga* Yü et Ku, var. nov.

A var. *omeiensi* differt foliis 5—9, oblongis vel obovatis, in parte superiore serratis, basi integris utrinque glabris; fructibus pyriformibus, pedicellis fructiferis sub maturitate leviter inflatis, rubris.

Xizang: Qamdo Xian (昌都县), alt. 3300 m., 25. V. 1976, Qing-Zang Exped. Veg. Group 8035 (Typus in HP); ibidem, Qing-Zang Exped. Veg. Group 10007; ibidem. Qing-Zang Exped. 73-94; ibidem, sine coll. 76-12.

本变种小叶片 5—9, 长圆形或倒卵长圆形, 锯齿在前半部, 基部全缘, 两面无毛; 果实梨形; 果梗短, 成熟时稍膨大, 红色。

腺果大叶蔷薇 新变种

Rosa macrophylla var. *glandulifera* Yü et Ku, var. nov.

A var. *macrophylla* Lindl. differt foliolis subtus glandulosi margine saepe dupliciter serratis, calycis tubo et pedicellis saepe dense stipitato-glandulosi.

Xizang: Yadong Xian (亚东县), alt. 2800 m. 9 IX. 1974, Qing-Zang Exped. 74-2109 (Typus in HP); ibidem, Qing-Zang Exped. Suppl. Group 75-0060; Mainling Xian (米林县), Xizang Exped. Med. Pl. 4229; Cona Xian (错那县), sine coll. 75-1640; Gyirong Xian (吉隆县), C. Y. Wu et al. 75—526.

本变种与原变种主要区别为小叶片下面有腺, 边缘通常为重锯齿; 萼筒和花梗常密被

腺毛。

腺毛小叶蔷薇 新变种

Rosa willmottiae Hemsl. var. *glandulifera* Yü et Ku, var. nov.

A var. *willmottiae* differt foliolis subtus glandulosis margine dupliciter serratis, dentibus apice glandulosis.

Xizang: Jomda Xian (江达县), alt. 3400 m., 19 VI. 1974, sine coll. 7005 (Typus in HP); Mainling, Xian (米林县), Qing-Zang Exped. Suppl. Group 75-913.

Szechuan: Dêge Xian (德格县), Chia Shen-Hsiu (贾慎修) 248.

本变种与原变种区别在其小叶边缘为重锯齿, 齿尖有腺, 下面有腺点。

腺叶绢毛蔷薇 新变型

Rosa sericea Lindl. f. *glandulosa* Yü et Ku, f. nov.

A f. *sericea* foliis subtus dense glandulosis pubescentibusque, margine tantum in parte superiore serratis recedit.

Xizang: Nyalam Xian (聂拉木县) alt. 3850, 23 VI. 1975, Qing-Zang Exped. 5818 (Typus in HP); Gyirong Xian (吉隆县), Xizang Exped. Med. Pl. 50; Burang Xian (普兰县), Qing-Zang Exped. Veg. Group 12986; Tingri Xian (定日县), Qing-Zang Exped. Veg. Group 7988; Lhunze Xian (隆子县), Qing-Zang Exped. Suppl. Group 74-0455; Mainling Xian (米林县), alt. 3100 m., 25. VIII. 1974, Qing-Zang Exped. 74-1937; Bomi Xian (波密县), T. S. Ying (应俊生) et D. Y. Hong (洪德元) 0232。

本变型的主要特征为小叶下面被腺毛和柔毛, 边缘仅上半部有锯齿。